# **Environmental Stewardship**

#### Governor's Award for **Environmental Excellence**

INDOT, along with Purdue University and Indiana Solid Waste Management Districts, received the 2002 Governor's Award for Environmental Excellence.

The joint project was called "Utilization of Crushed Glass in a Pipe Backfill Project."

Glass recovered in recycling programs operated by the solid waste districts in the southwestern part of the state is transported by INDOT vehicles to the Vincennes District Office complex for storage. The glass is ground to a certain size meeting INDOT project standards and becomes available to use in small construction projects as filler.

The first project was a small pipe replacement project located in the Vincennes District in the town of Bruceville on State Road 550. The project was a success and was opened to traffic again the same day.

This new use of recyled materials is now shared with local city and county highway departments in the southern part of the state that utilize INDOT specifications for their construction activities.

#### **Waste Management**

INDOT has targeted specific waste streams such as concrete/ asphalt, light bulbs, ballasts, waste oil, antifreeze, used oil filters, mercury containing devices and whole and scrap tires. In addition. tons of steel and aluminum scrap.

which is recovered from quardrails, sign posts and signs from INDOT construction projects, is sold to scrap metal dealers at the going market rate. INDOT has also been researching ways to use waste streams from other industries in the road construction process. This includes the utilization of crushed glass, shredded tire scraps, fly ash, foundry sand and coal combustion waste as possible fill materials in construction projects and the use of waste tires as a component in the compound used in crack sealing of roads.

#### **Recycling Success Stories**

In 1998 through 2002, more than five million tons of milled surface material was reused for road construction projects in Indiana.

From 1997 through 2002, INDOT recycled over 1,800 tons of tires from INDOT vehicles and tire shreds collected from INDOT roadways.

From 1997 through 2002, INDOT recycled close to 20,000 pounds of light bulbs, household batteries,

ballasts and mercury containing devices from facilities located throughout the state.

From 1999 through 2002, INDOT recycled close to 90,000 gallons of waste oil and related products from maintenance facilities. Through a closed-loop process the waste oil was re-refined to meet American Petroleum Institute (API) Standards and sold back to the State of Indiana.

http://www.in.gov/dot



#### **Greening the Government:**

In 2002, INDOT once again took great strides toward Greening the Government. These efforts included the development of a Clean Your

Files Day Program
specific to INDOT
facilities, the
creation of INDOT's
own recycling
mascot "Roady
Recycler" (pictured)
and implementation of
a mercury containing devices into

Our waste diversion efforts have continued to assist in conservation of the state's landfill space as well as the nation's resources. The amount of renewable resources recovered from the INDOT facilities at the state level has also significantly reduced the expenditures related to the cost of disposal.

an already comprehensive program.

The most prominent waste stream produced by INDOT facilities is shop wastes. These wastes include waste oil, oil filters, antifreeze, clay-based oil absorbents and mineral spirits produced from

### Did you know? ?



- Waste Concrete and Millings—more than one million tons
- Tires—Whole and Scrap: more than 600 tons
- Shop Waste—almost 18 tons and 3,520 gallons
- Hazardous Waste—almost 1,330 pounds and 805 gallons
- Bulbs, Household Batteries, Ballasts, Mercury Containing Devices—approximately 3,000 pounds
- Waste Oil-45,000 gallons

the fleet of INDOT vehicles and equipment. In 2002, INDOT recycled close to 60,000 gallons of liquid waste from facilities state—wide.

A major portion of the liquid waste recycled involved waste oil. The closed-loop program with Safety Kleen enabled INDOT to collect thousands of gallons of waste oil to re-refine and utilize once again in state vehicles.

For the past 12 years, INDOT has taken part in the recycling program that is operated in all state government facilities within Marion

County. Over the past five years, INDOT has helped the state save approximately \$200,000 in waste disposal fees. Even better, INDOT sent more than 5,000 tons of office paper, newspaper and magazines to paper recyclers, which earned close to \$50,000 for the state.

INDOT, as well as other state departments within Marion County, also recycled a significant amount of aluminum, steel, plastic, glass containers as well as cardboard which further minimized the amount of waste discarded in the state's landfills.

## Our people, Our values

Matthew Frazer
Environment, Planning
and Engineering



Matthew Frazer works as a development specialist and heads up INDOT's recycling efforts. He has worked in the Environment, Planning

and Engineering Division for four and a half years.

He earned his bachelor's degree in 1991 in Industrial Technology from Purdue University, and his master's degree in 1993. Through the course of his schooling, his focus has always been on Environmental Management.

Matt came to INDOT for the good opportunities to learn and to utilize his education. "My favorite part of the job is learning new information and working with people," Matt said.

